January 26, 2005
SIP STEERING COMMITTEE MEETING SUMMARY

In Attendance:

- Bob Rio, AIM
- Dave Conroy, EPA
- Richard Rothstein, KM CHNG Environmental
- Howard Bernstein, DOER
- Paula Hamel, Dominion Energy New England, Inc.
- Wig Zamore, MVTF, STEP
- John Bailes, MVTF
- John LeFebvre, Polaroid
- David Cash, EOEA
- John Graham, NESCAUM

DEP Staff:

- Eileen Hiney
- Barbara Kwetz
- Paul Davis
- Don Squires
- Glenn Keith
- Richard Fields
- Azin Kavian

I & M update

Referring to a handout that he provided, Paul Davis updated the committee on progress made to improve the state's I & M program. He noted that two of three Reliability Standards that were included in the I&M Program Contract Amendment were met during the October through December 3-month evaluation period. The standards that were met are the Tier 1 (critical components) initial audits and Tier 2 (less critical components) initial audits. The program fell slightly short of meeting the third Reliability Standard for follow-up Tier 1 audits, as repairers encountered more challenging problems at a couple of stations. All of the standards are designed to improve the reliability of the tests.

PM-2.5 Standard

EPA Final Non-Attainment Designations

Eileen Hiney noted that at the December 2003 meeting the committee heard a presentation on the process for EPA's designation of PM 2.5 non-attainment areas. At that time Massachusetts was reviewing its PM 2.5 monitoring data in order to make a recommendation to EPA concerning MA attainment status. The data demonstrated that none of the Massachusetts PM2.5 monitors violated the standard, although the Boston north end monitor was close to non-attainment.

The Governor submitted his recommendation concerning Massachusetts PM2.5 attainment status to EPA in February 2004. EPA took final action on the states' recommendations in December and has officially designated MA as an attainment area for PM-2.5. Dave Conroy discussed the attainment status of other states and the schedule for EPA's issuance of a PM2.5 implementation rule.

The annual and daily PM 2.5 standards are undergoing review, as required under by the Clean Air Act. EPA is under a consent decree deadline for completing review of the PM standards and will publish, by January 31, 2005, its second draft staff paper, which will discuss policy options for setting standards. The final draft staff paper will be published by June 30, 2005, with a proposed rule by December 2005 and a final rule by September 2006.

NESCAUM Health Effects Report

John Graham reviewed a comprehensive NESCAUM report that analyze recent PM-2.5 health studies. NESCAUM will submit the report to EPA as part of EPA's review of the PM-2.5 standard. The NESCAUM technical report concludes that the current standards – 65 $\mu g/m^3$ and 15 $\mu g/m^3$, for 24-hr and annual averaging periods, respectively - do not adequately protect human health. Health effects were reported at 98^{th} percentile values that are well below the 65 $\mu g/m^3$ standard. There is no minimum threshold below which health effects vanish.

NESCAUM examined the relationship between the annual and daily standards and, as Mr. Graham demonstrated graphically, found that making either the 24-hr or annual standard (but not both) more stringent would provide little benefit compared to that obtained by tightening both standards. The NESCAUM Directors recently concluded that the technical data support lowering the annual and 24-hr standards to 12 and 30 $\mu g/m^3$s, respectively. The NESCAUM analysis reflects the sensitive populations in the Northeast that would benefit from the added health protection of lowering the standards to these levels.

The report also raises the issue of whether agencies should shift their emphasis from total mass of particulates to individual constituents, such as the mobile source component. For now, however, the focus remains mass.

Local Mortality Data

Wig Zamore presented an analysis of local health data. He argued that current regulatory planning might be placing too much emphasis on regional scale solutions to the PM-2.5 problem, while greater health benefits may be realized through control of local PM-2.5 emissions. Supporting his argument is a study showing that PM-2.5 and mortality correlate three times better when smaller geographic areas are examined.

Other studies also point to local effects, showing, for example, that proximity to roadways or to urban centers may overshadow regional impacts. In Massachusetts, Somerville and Chelsea have the greatest excess mortality and the two health endpoints most associated with particulate are lung cancer and heart attacks.

8-hour Ozone Standard Implementation

2002/2009 regional inventory development

Ken Santlal provided information concerning the development of the 2002 base year inventory, which he discussed at the January meeting. He presented data concerning biogenic emissions in response to questions posed in January. He also discussed development of the state emission inventories for future years. Future year inventories are required for the 8-hour ozone SIP attainment demonstration as well as for regional haze planning.

Ken uses various methods and data to project emissions including state employment training numbers, DOE forecasts of fuel use, an EPA model with growth factors for non-road emissions and VMT estimates from Mass Highway Department for on-road projections. A 2009 projected inventory will be developed for the 8-hour ozone SIP.

Barbara Kwetz reported on OTC's ongoing planning process to develop a regional modeling inventory for 2009, the year control measures need to be in place in order to demonstrate attainment in 2010. The OTC is working with MARAMA (Mid-Atlantic Regional Air Management Association) to develop a 2009 inventory that incorporates all the emission reductions that are anticipated as of 2009 from control measures already "on the books" or "on the way." To estimate these future emissions, OTC/MARAMA are surveying states for estimates of the reductions they anticipate by 2009.

When estimating emissions from the utility sector OTC is examining what control options should be assumed by 2009 given the current proposals for utility controls under either the federal Clear Skies legislation or under EPA's proposed Clean Air Interstate rule. The OTC is also considering what level of additional controls it should build into the 2009 inventory in order to address the predicted shortfall of emissions from whatever federal program is adopted. The OTC states are considering options to achieve greater reductions from the utility sector than those proposed under the federal programs. Options for additional utility sector controls will be presented to OTC Commissioners at a June 2005 meeting. By the end of 2005, the OTC Modeling Committee expects to demonstrate how close states will be to 8-hour ozone attainment as of 2009.

Major Source Thresholds

Eileen noted that there were requests to discuss another issue related to 8-hour ozone implementation – major source thresholds. In Part 1 of its 8-hour ozone implementation rule, EPA has said that states do not need to maintain the 1-hour ozone classification thresholds for New Source Review. States like Massachusetts that were serious non-attainment are now moderate – so are subject to less stringent major source thresholds.

Barbara said that Massachusetts is litigating EPA's NSR rule changes and that the OTC is discussing maintaining current thresholds throughout the OTC area. In light of this, Massachusetts is not currently inclined to lower its major source thresholds. Bob Rio suggested that the operating permit thresholds could be de-coupled from the federal NSR thresholds. This would be of benefit to a number of sources that are required to obtain Title V operating permits because of fuel consumption. Barbara and Don Squires would review the number of sources that might benefit from such a change.

Next Meeting

The next meeting is scheduled for April 28, 2005 at 10:00 a.m.